OIPE WPS7 JUL 05 2006 PATENT & TRADEMARK OFFICE

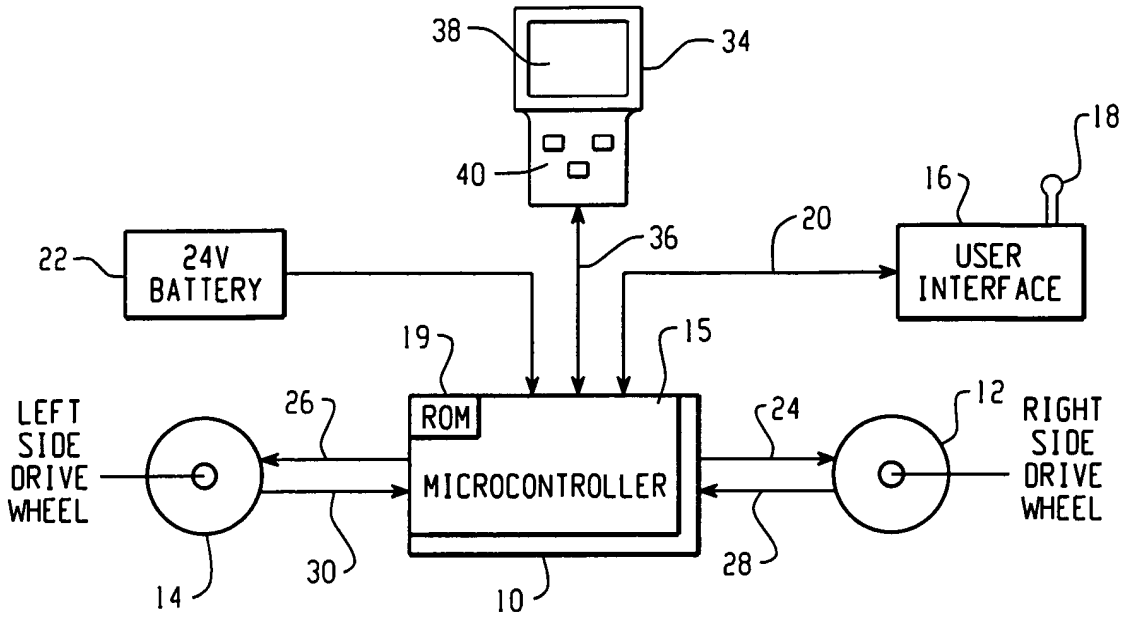

Fig. 1
(BACKGROUND)

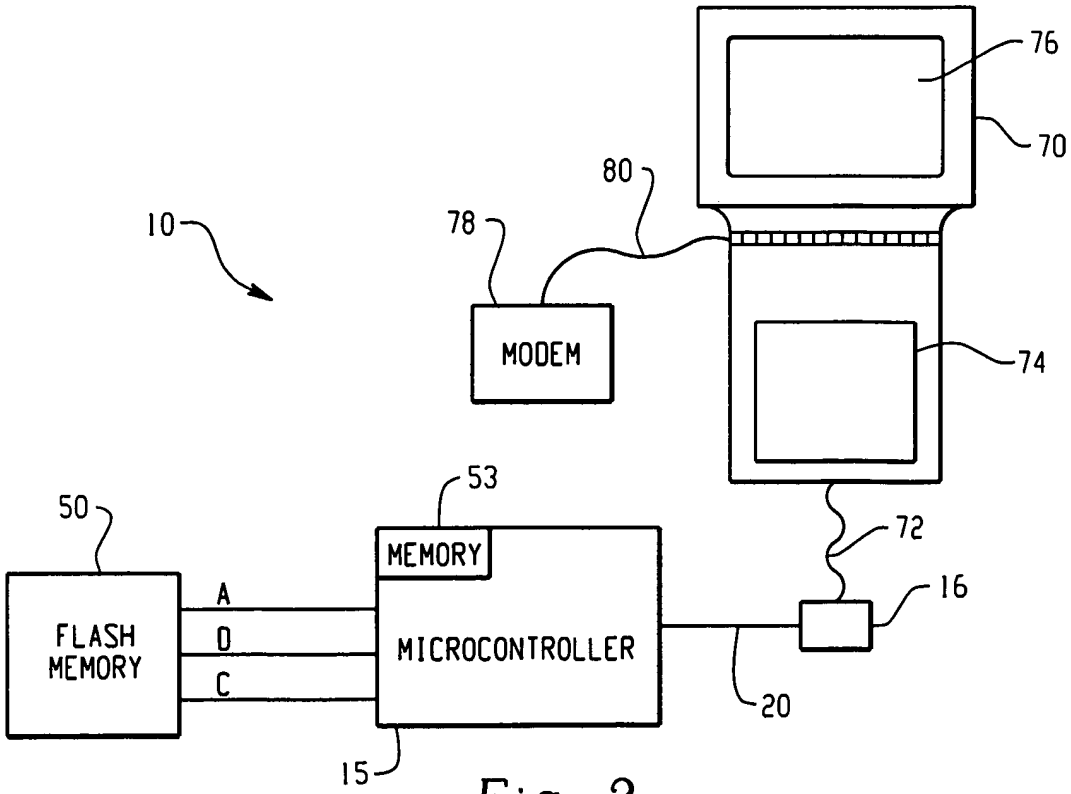

Fig. 2

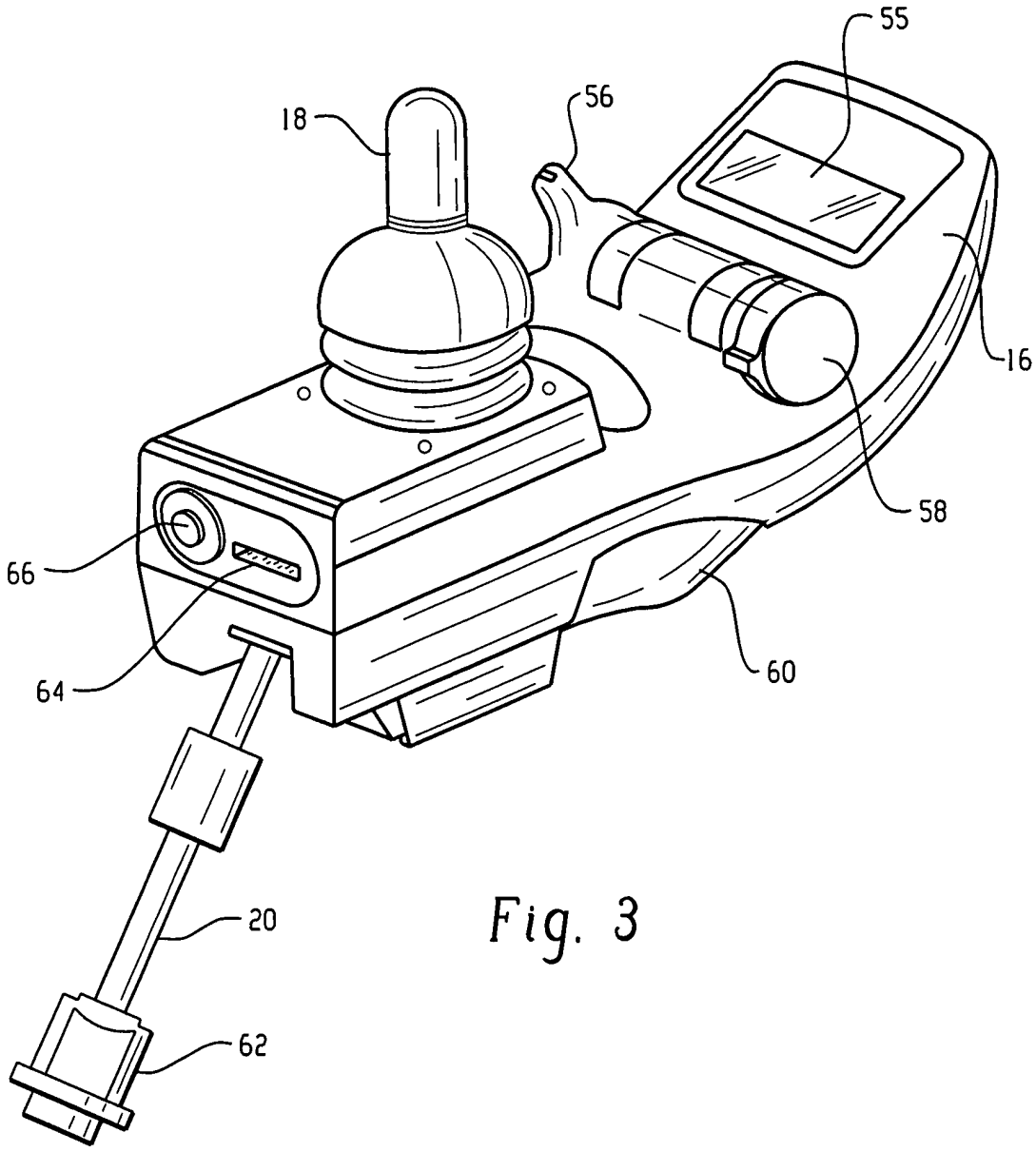

Fig. 3

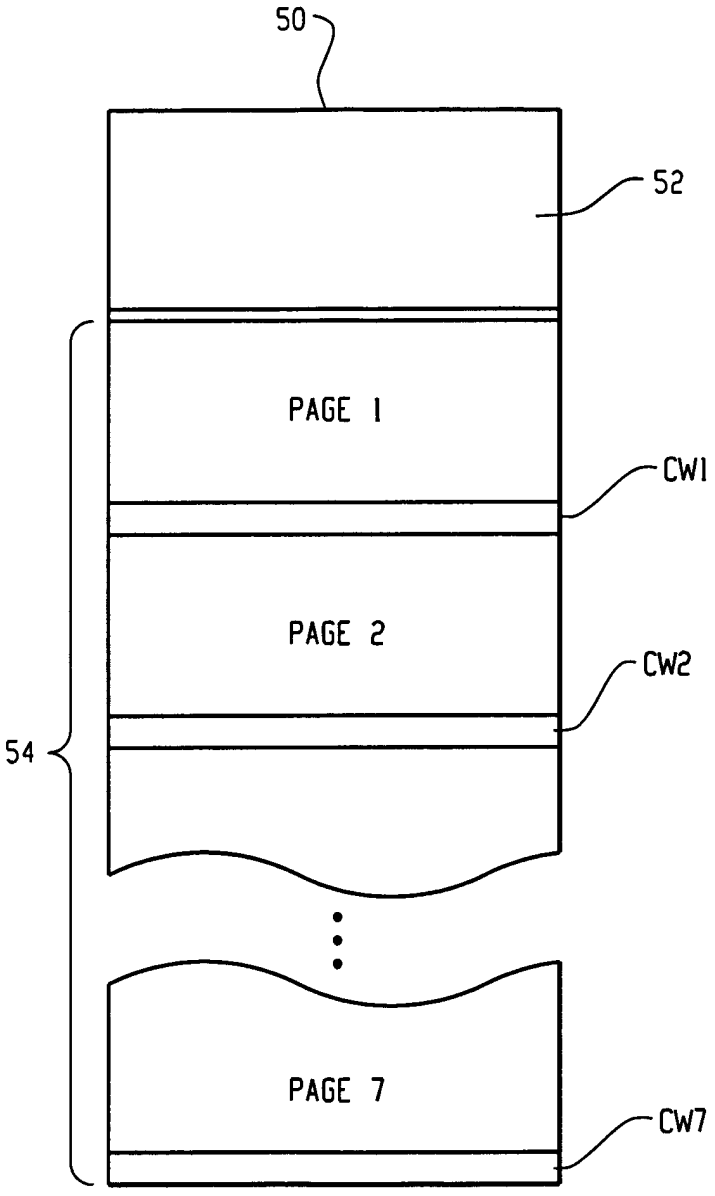

Fig. 4

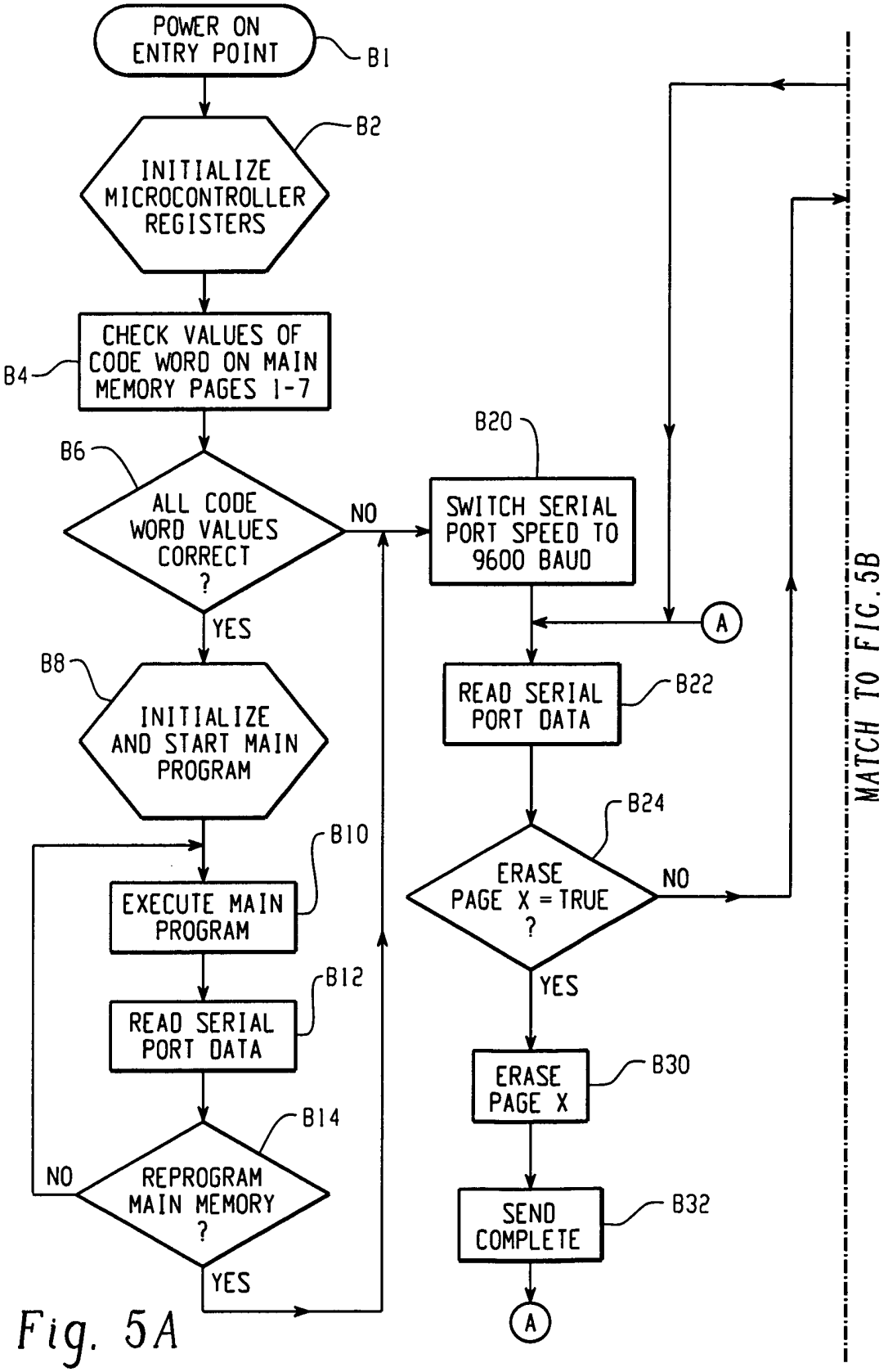
POWER ON ENTRY POINT
B1
INITIALIZE MICROCONTROLLER REGISTERS
B2
CHECK VALUES OF CODE WORD ON MAIN MEMORY PAGES 1-7
B4
ALL CODE WORD VALUES CORRECT ?
B6
NO
YES
INITIALIZE AND START MAIN PROGRAM
B8
EXECUTE MAIN PROGRAM
B10
READ SERIAL PORT DATA
B12
REPROGRAM MAIN MEMORY ?
B14
NO
YES
SWITCH SERIAL PORT SPEED TO 9600 BAUD
B20
A
READ SERIAL PORT DATA
B22
ERASE PAGE X = TRUE ?
B24
NO
YES
ERASE PAGE X
B30
SEND COMPLETE
B32
A
MATCH TO FIG. 5B

Fig. 5A

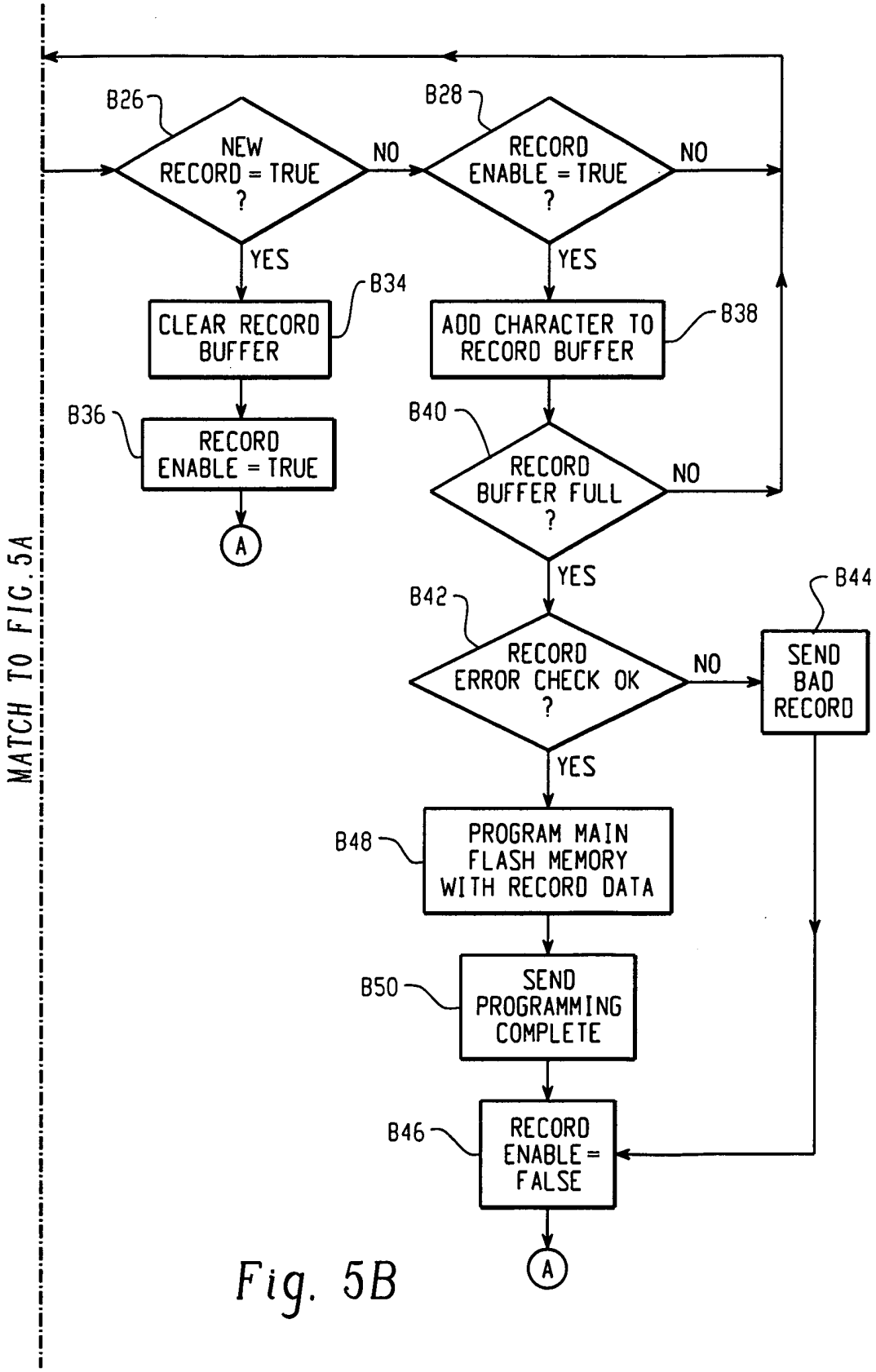
MATCH TO FIG. 5A
B26
NEW RECORD = TRUE ?
NO
B28
RECORD ENABLE = TRUE ?
NO
YES
YES
B34
CLEAR RECORD BUFFER
B38
ADD CHARACTER TO RECORD BUFFER
B36
RECORD ENABLE = TRUE
B40
RECORD BUFFER FULL ?
NO
A
YES
B42
RECORD ERROR CHECK OK ?
NO
B44
SEND BAD RECORD
YES
B48
PROGRAM MAIN FLASH MEMORY WITH RECORD DATA
B50
SEND PROGRAMMING COMPLETE
B46
RECORD ENABLE = FALSE
A

Fig. 5B

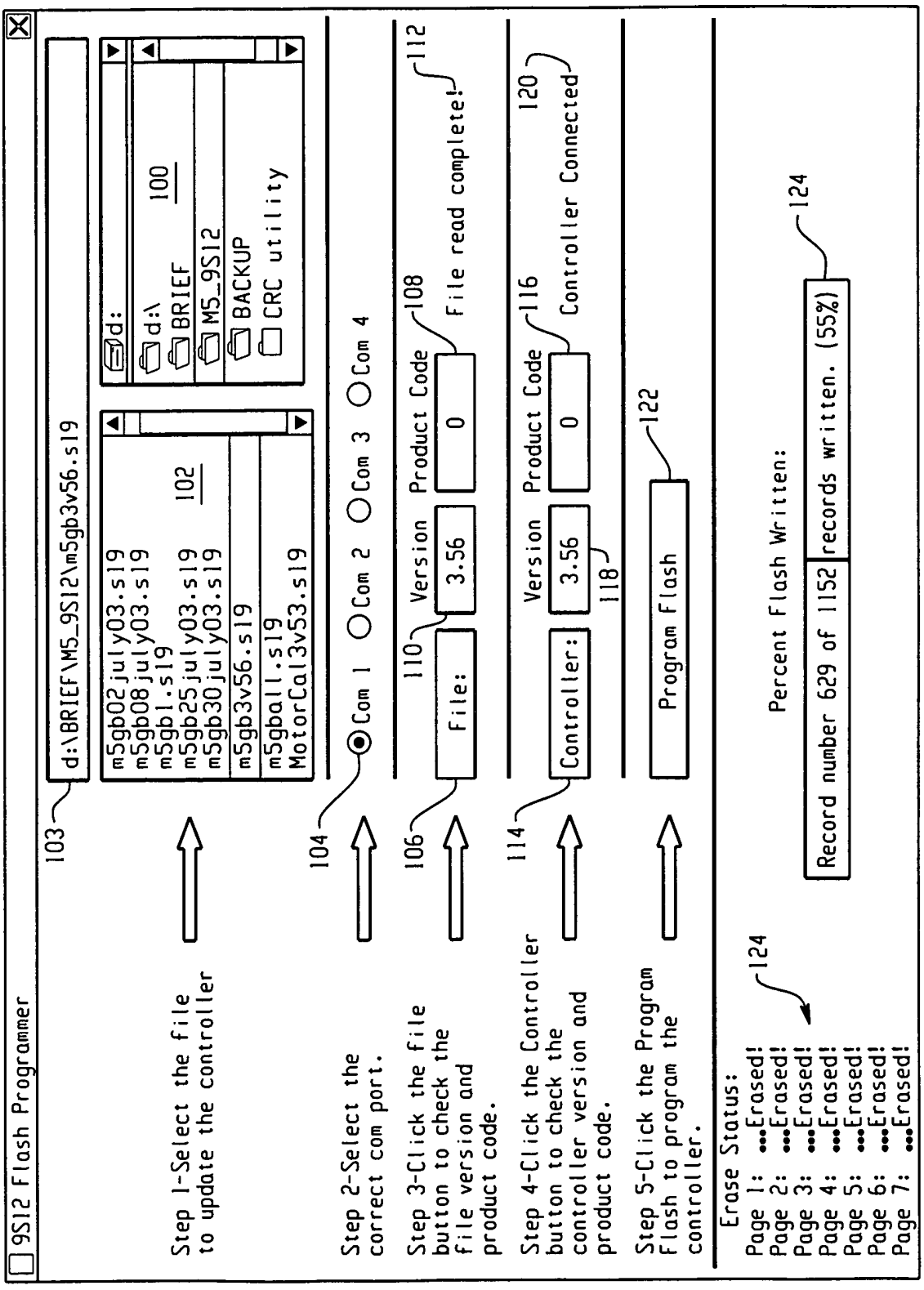
9S12 Flash Programmer
d:\BRIEF\M5_9S12\m5gb3v56.s19
103
m5gb02july03.s19
m5gb08july03.s19
m5gbl.s19
m5gb25july03.s19
m5gb30july03.s19
m5gb3v56.s19
m5gball.s19
MotorCal3v53.s19
102
d:
d:\
BRIEF
M5_9S12
BACKUP
CRC utility
100
Step 1-Select the file to update the controller
Com 1
Com 2
Com 3
Com 4
104
Step 2-Select the correct com port.
File:
106
Version
3.56
110
Product Code
0
108
File read complete!
112
Step 3-Click the file button to check the file version and product code.
Controller:
114
Version
3.56
118
Product Code
0
116
Controller Connected
120
Step 4-Click the Controller button to check the controller version and product code.
Program Flash
122
Step 5-Click the Program Flash to program the controller.
Erase Status:
Page 1: ...Erased!
Page 2: ...Erased!
Page 3: ...Erased!
Page 4: ...Erased!
Page 5: ...Erased!
Page 6: ...Erased!
Page 7: ...Erased!
124
Percent Flash Written:
Record number 629 of 1152 records written. (55%)
124

Fig. 6